VBA Edit & Timestamp Script

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These three functions (code attached below) can be used to auto-populate 2 'timestamp' fields and an 'edited by' field within an ArcMap edit session whenever a feature is created or changed. They should work with all geodatabases (SDE, file, personal) and shapefiles.

Paste these functions into MXD's Project-->ArcMap Objects-->ThisDocument code window. Then save and reopen the MXD. Alternatively, paste into your Normal template's ThisDocument code window if you want this functionlity in all projects on your machine.

As posted below the code will work with the field name and types lised below. Field names are case sensitive and can, of course, be customized in the code. Missing fields will be ignored.

Create Feature Event - Impacted Field Names (Type) --> Set to Value:
 - EditedBy (Text) -->Windows User Name

 - CreatedOn (Date) --> Now Date/Time

 - ModifiedOn (Date) --> Now Date/Time
 - AGRC_MDATE (Date) --> Now Date/Time

Edit Feature Event - Impacted Field Names (Type) --> Set to Value:
 - EditedBy (Text) -->Windows User Name

 - ModifiedOn (Date) --> Now Date/Time
 - AGRC_MDATE (Date) --> Now Date/Time
 Note: If this code or any other code is interupted or errors out, you'll need to rerun the MxDocument_OpenDocument function to get the edit stamping to start working again.

Function Descriptions:

MxDocument_OpenDocument - This script must be run before the edit event scripts will be triggered. It will run each time an ArcMap project with this function in it is opened or the script ican be run manually. To get these edit stamping scripts to work after initially installing them, you'll have to either 1) save your project and reopen it, or 2) manually run this script. This script gets a handle on the ArcMap Editor object and initializes the process to listen for feature creation and feature edit events.

m_pEditEvents_OnCreateFeature - This script is triggered by the creation of a new feature using the ArcMap interface within an edit session. It populates the EditedBy field with the current user's windows login name and the CreatedOn and ModifiedOn date with the current system time.

m_pEditEvents_OnChangeFeature - This script is triggered by an attribute or geometry edit to a feature using the ArcMap interface within an edit session. It populates the EditedBy field with the current user's windows login name and ModifiedOn date with the current system time. VBA Code:

```
'3/13/08 bgranberg@utah.gov

Private m_bPopulate As Boolean
Private m_EditEventChange As Boolean
Private WithEvents m_pEditEvents As Editor

Private Function MxDocument_OpenDocument() As Boolean
    Dim pEditor As IEditor
    Dim pUID As New UID
    pUID = "esriCore.Editor"
```

```
      Set pEditor = Application.FindExtensionByCLSID(pUID)
      If pEditor Is Nothing Then
         MsgBox "Unable to Enable UIC Custom Editing Environment", vbOKOnly, "ERROR...UIC Editing Environment"
         Exit Function
      End If
      Set m_pEditEvents = pEditor
      m_bPopulate = True
      m_EditEventChange = False
      MsgBox "Edit Event Field Population is Enabled", vbOKOnly, "AGRC Custom Editing..."
End Function

Private Sub m_pEditEvents_OnChangeFeature(ByVal obj As esriGeoDatabase.IObject)
    If m_EditEventChange = False Then

        Dim pRow As IRow
        Set pRow = obj


        If Not m_bPopulate Then Exit Sub

        Dim editedByFieldIndex As Integer
        Dim modifiedOnFieldIndex As Integer
        Dim mDateFieldIndex As Integer
        Dim changeMade As Boolean
        editedByFieldIndex = pRow.Fields.FindField("EditedBy")
        modifiedOnFieldIndex = pRow.Fields.FindField("ModifiedOn")
        mDateFieldIndex = pRow.Fields.FindField("AGRC_MDATE")

        changeMade = False

        If editedByFieldIndex > 0 Then
          pRow.Value(editedByFieldIndex) = Environ("USERNAME")
          changeMade = True
        End If

        If modifiedOnFieldIndex > 0 Then
          pRow.Value(modifiedOnFieldIndex) = Now
          changeMade = True
        End If

        If mDateFieldIndex > 0 Then
          pRow.Value(mDateFieldIndex) = Now
          changeMade = True
        End If

        If changeMade Then
          m_EditEventChange = True
          pRow.Store
        End If
    End If
    m_EditEventChange = False
End Sub

Private Sub m_pEditEvents_OnCreateFeature(ByVal obj As esriGeoDatabase.IObject)
      'MsgBox Now

  Dim pRow As IRow
  Dim CreatedOnFieldIndex As Integer
  Dim modifiedOnFieldIndex As Integer
  Dim editedByFieldIndex As Integer
  Dim mDateFieldIndex As Integer
  Dim changeMade As Boolean

  Set pRow = obj
```

```
      If Not m_bPopulate Then Exit Sub

      CreatedOnFieldIndex = pRow.Fields.FindField("CreatedOn")
      modifiedOnFieldIndex = pRow.Fields.FindField("ModifiedOn")
      editedByFieldIndex = pRow.Fields.FindField("EditedBy")
      mDateFieldIndex = pRow.Fields.FindField("AGRC_MDATE")


      changeMade = False

      If modifiedOnFieldIndex > 0 Then
        pRow.Value(modifiedOnFieldIndex) = Now
        changeMade = True
      End If

      If mDateFieldIndex > 0 Then
        pRow.Value(mDateFieldIndex) = Now
        changeMade = True
      End If

      If CreatedOnFieldIndex > 0 Then
        pRow.Value(CreatedOnFieldIndex) = Now
        changeMade = True
      End If

      If editedByFieldIndex > 0 Then
        pRow.Value(editedByFieldIndex) = Environ("USERNAME")
        changeMade = True
      End If

      If changeMade Then
        m_EditEventChange = True
        pRow.Store
      End If
      m_EditEventChange = False
    End Sub
```